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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,352	08/18/2000	Hidekazu Nagasawa	50090-237	5215

7590 01/11/2005  
McDermott Will & Emery  
600 13th Street NW  
Washington, DC 20005-3096

EXAMINER
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TON, DAVID

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/641,352

Applicant(s)

NAGASAWA ET AL.

Examiner

David Ton

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 4, 7, 10 and 13 is/are allowed.
- 6) ☒ Claim(s) 2 and 3 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 8, 9, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. Applicants Request for Reconsideration filed on 07/28/2004 has been reviewed.
2. Claims 1-13 are presented for examination.
3. Applicant's arguments with respect to claims 2-3 have been considered but are moot in view of the new ground(s) of rejection.
5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3 are rejected under 35 U.S.C. ' 103(a) as being unpatentable over **Sourgen et al.** (Sourgen) patent no. **5,850,452** in view of **Reichert et al.** (Reichert) patent no. **6,389,525**.

As per claim 2:

Sourgen does not teach the scrambling circuit including a data storage apparatus [see Fig. 2] comprising a scrambling circuit [permutation circuit DBr1-DBr3 of Fig. 2] for converting an input signal to a desired format, and a storage device for storing converted data [see claim 6].

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Sourgen does not teach the scrambling circuit is constituted by a rewritable device.

However, a scrambling circuit which is constituted by a rewritable device is well known in the art. For example, Reichert teaches an address scrambling circuit [see Fig. 2] including RAMs 150 and 152 that act as lookup tables between the X and Y addresses and the output of scramble RAMs connect to respective selectors 154 and 156 that distribute the scramble signals along respective X and Y scramble buses 158 and 160 [see col. 6 lines 39-50].

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sourgen by implementing the permutation circuit DBr using RAMs as taught by Reichert. This modification would have been obvious and a person having ordinary skill in the art would have been motivated to do so as a matter of choice because it would perform the same scrambling function.

As per claim 3:

Reichert teaches said scrambling circuit includes a plurality of conversion circuits [RAM 150 and RAM 152 of Fig. 2] each converting said input signal according to different rules [X and Y addresses, see col. 6 lines 39-50]; and a selector for selecting one of the output of the plurality conversion circuits [selector 172 of Fig. 2].

7. Claims 1, 4, 7, 10 and 13 are allowed.

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8. Claims 5, 6, 8, 9, 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Remarks***

10. Applicant argued that (A) prior arts do not teach the scrambling circuit is constituted by a rewritable device and included a selector for selecting one of the output of the plurality conversion circuits.

As to point (A), the newly cited art, Reichert, teaches a scrambling circuit is constituted by a rewritable device [RAM 150 of Fig. 2] and included a selector for selecting one of the output of the plurality conversion circuits [selector 172 of Fig. 2].


### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Ton whose telephone number is (571) 272-3828. The examiner can normally be reached on M-Th from 5:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David Ton  
Primary Examiner  
Art Unit 2133